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September 18, 2017 12:00 ET

## **HURRICANE HARVEY MANAGEMENT REPORT**

*Information contained in this report reflects HQ and regional reporting from the most recently completed operational period as well as other reports provided by HQ, regional and interagency sources.*

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### **National Incident Management Objectives**

- Objective 1: Ensure that health and safety of the EPA response is considered at all times.
- Objective 2: Establish an incident management structure and processes employing the Incident Command System to enable effective overall management of the event with deployment of resources (staff and equipment) in a rapid, aggressive and well-coordinated manner.
- Objective 3: Ensure prompt Review and Processing of Fuel Waiver requests.
- Objective 4: Prepare for and provide Rapid Assessment of Industrial facilities as requested by the State or under EPA's statutory program responsibilities for CERCLA Superfund, RMP and FRP facilities. Working with our state partners, contact industrial sources within the impacted area to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources.
- Objective 5: Prepare for and provide Rapid Assessment & Technical Assistance Drinking Water & Wastewater facilities as requested by the State or local government. EPA will support our state partners in contacting drinking water and waste water systems.
- Objective 6: Prepare a Sustained Response Plan that outlines the resource and equipment needs for a long duration response.
- Objective 7: Activate the Agency's Crisis Communication Plan to insure effective and efficient coordination of all incident communications.
- Objective 8: Encourage a collaborative federalism approach, where national, state and local governments interact cooperatively and collectively to solve common problems.
- Objective 9: Begin Agency internal and external coordination, under the National Disaster Recovery Framework, regarding Recovery Support Functions in which EPA is likely to be involved.

## **Executive Summary**

- U.S. Representative Culberson (7<sup>th</sup> District of Texas) is expected to visit Unified Command in Houston on September 18<sup>th</sup>. The U.S. Coast Guard Director of Incident Management and Preparedness Policy, Dana Tulis, is expected to visit on September 19<sup>th</sup> and U.S. House Speaker Paul Ryan is expected to visit on September 20<sup>th</sup> or 21<sup>st</sup>.
- EPA completed sample collection at 34 Texas Superfund sites potentially impacted by the storm on September 15<sup>th</sup>. EPA has released 23 post-hurricane Superfund site summaries based on preliminary data on the [www.epa.gov/hurricane-harvey](http://www.epa.gov/hurricane-harvey) website.
- All three branches of Unified Command continue recovering and staging orphan containers for proper disposal:
  - The Corpus Christi branch has transitioned all open sites to the appropriate TCEQ Regional office for closeout;
  - All containers on the staging pad will be transferred to the Houston branch by September 18<sup>th</sup> before being shipped for disposal. Recovery activities should be completed in 10-20 days; and
  - The Port Arthur/Beaumont branch is projected to complete recovery activities within 5 days.
- Community Liaison teams continue to provide information regarding returning to flooded areas and handling of household waste in the counties of Aransas, San Patricio, Nueces, Wharton, Harris, Jasper, Newton, Montgomery, Fort Bend, Liberty, Brazoria, Galveston, Beaumont, Port Arthur, Jefferson, Orange, Chambers, Matagorda, and Baytown.
- TCEQ requested that FEMA increase EPA's ESF-10 Mission Assignment by \$8.3 million in stages. Once fully approved, this will bring the total funding for assessment and response to \$18.3 million.

## **Region 6 Significant Activities**

The Region 6 Region Emergency Operations Center (REOC) is currently activated and working under a limited Emergency Support Function (ESF) #10 FEMA Mission Assignment (MA). EPA has received MAs for over \$10.3 million for recovery operations to include assisting Texas with drinking water, wastewater, and hazmat recovery operations. FEMA announced plans to fund mission assignments in five-day increments.

<b>Mission Assignment Number</b>	<b>Funding Amount</b>	<b>Description of Assignment</b>
4332DR-TX-EPA-03	\$10,092,000	Region 6 field operations including assessing drinking & waste water infrastructure, implementation of Response Manager tracking system, response to hazardous substance releases and oil discharges.
4332DR-TX-EPA-01	\$275,000	Deployment of EPA to various locations, including but not limited to TX SEOC and the FEMA RRCC to support response operations.
<b>Total</b>	<b>\$10,367,000</b>	

### Number of Region 6 Personnel Involved

Personnel	EPA R6 Dallas	FEMA Denton	Texas JFO Austin	TX SEOC Austin	TCEQ Austin	Houston	Corpus Christi	Beaumont/ Port Arthur	Total
Region 6	56	0	2	2	0	53	13	10	136
START	3	0	0	1	0	4	8	9	25
ERRS	0	0	0	0	0	22	2	15	39
Other Contractor	0	0	0	0	0	0	0	0	0
Total	59	0	2	3	0	79	23	34	200

### Debris Recovery Operations

A Federal Debris Management Taskforce was established at the JFO in Austin with EPA serving as a member. Joint EPA and TCEQ field observation teams continue to observe debris staging and landfill operations within the hurricane impacted counties in Texas to ensure best practices and program requirements are being met. FEMA estimates debris to total 16.5 million cubic yards. Observations were completed at 81 sites in the Houston area on September 14<sup>th</sup> and 15<sup>th</sup>; observations will begin in Corpus Christi on September 18<sup>th</sup>.

### Container Recovery Operations

This chart includes daily and cumulative data on container recovery:

Waste Received at All Staging Pads to Date – Containers and Cylinders					
	Drums [55 gals]	Small Containers [<55 gals]	Large Containers [>55 gals]	Cylinders	Total
9/17/2017	14	23	6	16	59
Total	351	236	32	97	716

### Corpus Christi Branch

The Oil/Vessel Discharge Recovery Teams continued to assess open targets and placed removal notification placards on five vessels in Cove Harbor. Emergency Response, Orphan Container Recovery, and Staging Area operations were completed and the assigned teams were demobilized.

### Houston Branch

The Air Operations Team conducted an overflight during which they cleared a 55-gallon container located in Bay City, Texas and identified two new sunken vessel targets in Dickinson Bayou.

### Beaumont/Port Arthur Branch

Land Recovery Teams collected orphan containers in the Sour Lakes, Orange, Rose City, and Beaumont, Texas areas. The Water Recovery Team collected orphan containers assessed by air operations in the Neches River. A total of 26 containers were recovered by all Port Arthur/Beaumont teams on September 17<sup>th</sup>.

### Emergency and Field Response Operations

Region 6 continues to collect and stage recovered orphan containers. They anticipate completion in Corpus Christi, Houston, and Beaumont over the next 10-20 days.

Daily & Cumulative Summary of Hazard Evaluations/Recovery				
Location	Opened		Closed	
	9/17/2017	Number of Targets	9/17/2017	Cumulative
Corpus Christi	0	5	2	101
Houston	0	8	29	378
Port Arthur/Beaumont	0	13	9	117
NRC Reports	0	0	1	5
<b>Total</b>	<b>0</b>	<b>26</b>	<b>41</b>	<b>601</b>
Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.				

Daily & Cumulative Summary of Spills/Discharges (non-vessels)				
Location	Opened		Closed	
	9/17/17	Number of Facilities/Spills	9/17/17	Cumulative
Corpus Christi	0	0	0	33
Houston	0	1	0	77
Port Arthur/Beaumont	0	6	1	19
NRC Reports	1	14	3	110
<b>Total</b>	<b>1</b>	<b>21</b>	<b>4</b>	<b>239</b>
Note: Open means the target is yet to be recovered/cleaned up. Closed means the target was recovered/cleaned up by a Responsible Party or not found upon return to location.				

Number of Field Team Personnel on September 17 <sup>th</sup>				
Team Type	Corpus Christi	Houston	Port Arthur/ Beaumont	Total
Hazard Evaluation	0	1	1	2
Oil Discharge Assessment	0	2	0	2
ER/Orphan Container Recovery	1	8	3	12
Oil/Vessel Recovery	4	0	0	4
Staging Areas	1	1	1	3
Air Operations	0	1	0	1
Air Monitoring	0	1	0	1
Drinking Water Infrastructure Assessment	0	0	0	0
Wastewater Infrastructure Assessment	0	0	0	0
<b>Total</b>	<b>6</b>	<b>14</b>	<b>5</b>	<b>25</b>

### **Superfund NPL Sites**

- EPA provided oversight to potentially responsible parties (PRPs) and independently collected samples at 34 Texas Superfund sites and 9 Louisiana sites to confirm no releases due to storm impacts. The sampling is part of a longer term assessment that will be used to transition sites back to normal cleanup operations. All preliminary un-validated results for the sites located in Texas have been received while results for the Louisiana sites are expected by September 18<sup>th</sup>. This data is being posted to [www.epa.gov/hurricane-harvey](http://www.epa.gov/hurricane-harvey).
- All 43 Federal Superfund sites in the affected area have been assessed. Of these, 41 sites have been cleared, and two sites (San Jacinto Pits and US Oil) require additional follow-up:
  - *San Jacinto Waste Pits*: The responsible party (RP) completed all manual probing activities of the cap on September 14<sup>th</sup>. On September 15<sup>th</sup>, the EPA Dive Team collected underwater sediment samples for dioxin/furan analysis in areas where gaps in the cap were found. The PRPs' dive team is collecting sediment samples from the same areas for the same analysis. The RP submitted, and EPA approved the cap repair work plan on September 15<sup>th</sup>. The RP began maintenance work on September 16<sup>th</sup>.
  - *US Oil*: Since the time the pump down operations began, after hurricane landfall, a total of 64 truckloads of storm water (approximately 320,000 gallons) have been removed from the Site and disposed of in an off-site permitted facility. As of September 18<sup>th</sup>, the PRP Group is managing the site under normal operations and conditions.

### **Air Monitoring**

A Trace Atmospheric Gas Analyzer (TAGA) team completed monitoring of neighborhoods and areas around Dow Chemical Company, Valero, Marathon, and Blanchard Refinery facilities in Texas City on September 17<sup>th</sup>. The team also monitored Phillips 66 Sweeny Refinery, Chevron Phillips Sweeny Old Ocean, and Conoco Phillips San Bernard Terminal in Sweeny, Texas. No monitored readings at any of the Sweeny or Texas City facilities exceeded the TCEQ Air Monitoring Comparison Values short-term screening levels. This team is relocating to Corpus Christi and plans to monitor the following facilities on September 18<sup>th</sup>: Formosa Plastics, Formosa Plastics Marine terminal, and INVISTA Victoria.

A second TAGA team will be based in Port Arthur and will monitor the following facilities on September 18<sup>th</sup>: Flint Hills Port Arthur, Total Petrochemicals Port Arthur Refinery, Valero (Premcor) Port Arthur Refinery, Motiva Port Arthur Refinery, Oiltanking - Motiva Port Neches Terminal, Shell Pipeline - Crude Product, and Huntsman Petrochemical Port Neches Facility.

### **Drinking Water/Wastewater Assessments**

As of September 14<sup>th</sup>, drinking water and wastewater assessments have been completed. The remaining systems have been transitioned to the Texas Commission on Environmental Quality (TCEQ) for completion. Of the 2,022 systems designated for follow up, EPA's collaborative work with the State has ensured the return of 1,945 community water systems to fully operational status. These systems cover 99% of the population in the greater Houston area (7.23 out of 7.26 million served).

### EPA Headquarters Significant Activities:

The HQ EOC is activated to Level 1 in support of the Region 6 response for Hurricane Harvey. The HQ EOC is coordinating with Region 6 and other Federal agencies. Personnel have also deployed to the FEMA NRCC to staff the ESF-10 desk. EPA Senior Management that comprise the Policy Coordinating Committee (PCC) developed and issued senior management objectives that form the basis of field strategy and tactics in response to Harvey.

### Headquarters Mission Assignments

Mission Assignment Number	Funding Amount	Description of Assignment
4332DR-TX-EPA-01	\$10,000	FEMA HQ ESF-10 Desk Support
4332DR-TX-EPA-02	\$40,000	FEMA HQ ESF-10 Desk Support
<b>Total</b>	<b>\$50, 000</b>	

### Number of HQ Personnel Involved in the EOC

Personnel	AO	OAR	OARM	OCFO	OCSPP	OECA	OEI	OGC	OLEM	ORD	OW	PIO	ATSDR	Totals
Employees	0	0	0	0	1	1	0	1	13	1	1	1	1	20
Contractors	0	0	0	0	0	0	3	0	3	0	0	0	0	6
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>26</b>

### Fuel Waivers

EPA issued No Action Assurance (NAA) Extensions to TCEQ on September 15<sup>th</sup>, on Loading of Tank Fuel Trucks at Petroleum Distribution Terminals, Landing Roofs on Gasoline Storage Vessels, and the Use of Vapor Recovery Systems. The extensions were provided until September 22<sup>nd</sup> at 11:59 PM CDT. The NAA letters are available to the public on [www.epa.gov/hurricane-harvey](http://www.epa.gov/hurricane-harvey) and a press release was issued highlighting these three NAA letters.

Affected State	Waiver Request	Date Received	Status Talking Point	Waiver Response
<b>Reid Vapor Pressure Requirements Waivers</b>				
TX	Letter from TCEQ requesting a waiver of the RVP, RFG and TxLED standards in the Governor's Disaster Proclamation	8/25/17	Extended to October 1st	<a href="https://www.epa.gov/newsreleases/epa-acts-continue-waiver-fuel-requirements-texas">https://www.epa.gov/newsreleases/epa-acts-continue-waiver-fuel-requirements-texas</a>
LA	Letter from LA governor requesting a waiver of the low RVP requirements.	8/28/17	Granted on 8/28/17	<a href="https://www.epa.gov/sites/production/files/2017-08/documents/louisianafuelswaiver082817.pdf">https://www.epa.gov/sites/production/files/2017-08/documents/louisianafuelswaiver082817.pdf</a>
AR	The state is drafting a waiver request to temporarily waive the requirement for low 9.0lb RVP fuel.	8/31/17	N/A	N/A
OK	A statewide low RVP fuel waiver request was submitted and then the request was amended.	8/28/17	8/30/17	<a href="https://www.epa.gov/enforcement/second-multi-state-fuels-waivers">https://www.epa.gov/enforcement/second-multi-state-fuels-waivers</a>
<b>Dyed NRLM Diesel Fuel Waiver</b>				
TX	Letter from TX comptroller requesting a waiver of using dyed NRLM diesel fuel in motor vehicles.	8/29/17	Granted on 8/29/17; IRS expanded to cover all of TX on 9/3/17	<a href="https://www.epa.gov/enforcement/texas-diesel-waiver">https://www.epa.gov/enforcement/texas-diesel-waiver</a>
<b>Low Volatility Conventional Gasoline and Reformulated Gasoline (RFG)</b>				
Multi State*	<p>*CT, ME, MA, NH, RH, VT, DE, DC, MD, NJ, NY, and PA, FL, GA, NC, SC, VA, and WV; all mid-western states located in *PADD 2 - IL, IN, IA, KS, KY, MI, MN, MO, NE, ND, SD, OH, OK, TN, and WI; and all Gulf coast states located in PADD 3 -AL, AR, LA, MS, NM, and TX</p> <p>Issuance of waivers based on requests for the allowance of regulated parties within the listed states to produce, sell, or distribute conventional winter gasoline (including BOBs) with an RVP of 11.5 psi before the addition of any ethanol in any RFG covered area. The waiver for El Paso goes until September 16<sup>th</sup> due to their State Implementation Plan requirements.</p>	8/30/17	Expired; no longer needed	<a href="https://www.epa.gov/enforcement/second-multi-state-fuels-waivers">https://www.epa.gov/enforcement/second-multi-state-fuels-waivers</a>

\*PADD: Petroleum Administration for Defense Districts



## **Communications**

- The Crisis Communication Plan remains activated. EOC Public Information Officer (PIO) continues to work on developing fact sheets on issues regarding the recovery including how to handle household hazardous waste and other debris. Region 6 PIO and Data Management team created a *Region 6 Hurricane Harvey - Public Story Map*. The map is located at this link:  
<https://epa.maps.arcgis.com/apps/MapJournal/index.html?appid=fadbae6b2832436fb65ca497bd75b9a6>
- EPA issued a news release announcing that Administrator Pruitt approved a request from the State of Texas to continue to waive requirements for fuels in Texas through October 1. <https://www.epa.gov/newsreleases/epa-acts-continue-waiver-fuel-requirements-texas>